```
chain nodes :
    12  13  15
ring nodes :
    1  2  3  4  5  6  7  8  9  10
chain bonds :
    4-12  4-15  5-13
ring bonds :
    1-2  1-6  2-3  2-7  3-4  3-10  4-5  5-6  7-8  8-9  9-10
exact/norm bonds :
    1-2  1-6  3-4  4-5  4-12  4-15  5-6  5-13
normalized bonds :
    2-3  2-7  3-10  7-8  8-9  9-10


G1:O,S

G2:H,Ak

Match level :
    1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom  12:Atom
    13:CLASS  15:CLASS
```
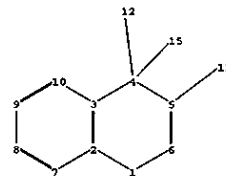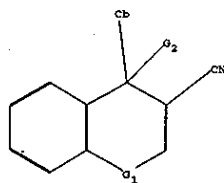
chain nodes :
    12 13 15 16
ring nodes :
    1   2   3   4   5   6   7   8   9   10
chain bonds :
    4-12   4-15   5-13   6-16
ring bonds :
    1-2   1-6   2-3   2-7   3-4   3-10   4-5   5-6   7-8   8-9   9-10
exact/norm bonds :
    1-2   1-6   3-4   4-5   4-12   4-15   5-6   5-13   6-16
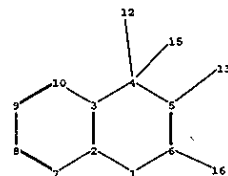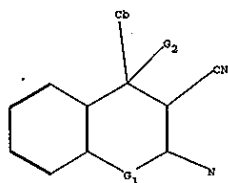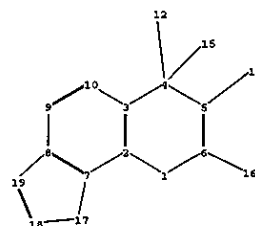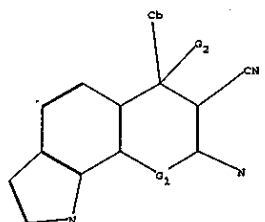normalized bonds :
    2-3   2-7   3-10   7-8   8-9   9-10

G1:O,S

G2:H,Ak

Match level :
    1:Atom   2:Atom   3:Atom   4:Atom   5:Atom   6:Atom   7:Atom   8:Atom   9:Atom   10:Atom   12:Atom
    13:CLASS   15:CLASS   16:CLASS

chain nodes :
   12   13   15   16
ring nodes :
   1   2   3   4   5   6   7   8   9   10   17   18   19
chain bonds :
   4-12   4-15   5-13   6-16
ring bonds :
   1-2   1-6   2-3   2-7   3-4   3-10   4-5   5-6   7-8   7-17   8-9   8-19   9-10   17-18   18-19
exact/norm bonds :
   1-2   1-6   3-4   4-5   4-12   4-15   5-6   5-13   6-16   7-17   8-19   17-18   18-19
normalized bonds :
   2-3   2-7   3-10   7-8   8-9   9-10
isolated ring systems :
   containing 1 :

G1:O,S

G2:H,Ak

Match level :
   1:Atom   2:Atom   3:Atom   4:Atom   5:Atom   6:Atom   7:Atom   8:Atom   9:Atom   10:Atom   12:Atom
   13:CLASS   15:CLASS   16:CLASS   17:Atom   18:Atom   19:Atom

```
* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *
```

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	SEP 09	CA/CAplus records now contain indexing from 1907 to the present
NEWS 4	AUG 05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003
NEWS 5	AUG 13	Field Availability (/FA) field enhanced in BEILSTEIN
NEWS 6	AUG 18	Data available for download as a PDF in RDISCLOSURE
NEWS 7	AUG 18	Simultaneous left and right truncation added to PASCAL
NEWS 8	AUG 18	FROSTI and KOSMET enhanced with Simultaneous Left and Righ Truncation
NEWS 9	AUG 18	Simultaneous left and right truncation added to ANABSTR
NEWS 10	SEP 22	DIPPR file reloaded
NEWS 11	DEC 08	INPADOC: Legal Status data reloaded
NEWS 12	SEP 29	DISSABS now available on STN
NEWS 13	OCT 10	PCTFULL: Two new display fields added
NEWS 14	OCT 21	BIOSIS file reloaded and enhanced
NEWS 15	OCT 28	BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 16	NOV 24	MSDS-CCOHS file reloaded
NEWS 17	DEC 08	CABA reloaded with left truncation
NEWS 18	DEC 08	IMS file names changed
NEWS 19	DEC 09	Experimental property data collected by CAS now available in REGISTRY
NEWS 20	DEC 09	STN Entry Date available for display in REGISTRY and CA/CAplus

NEWS EXPRESS	NOVEMBER 14 CURRENT WINDOWS VERSION IS V6.01c, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

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```
* * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *
```

FILE 'HOME' ENTERED AT 11:01:27 ON 12 DEC 2003

```
=> filereg
FILEREG IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).
```

```
=> file reg
```

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 11:01:37 ON 12 DEC 2003
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 11 DEC 2003   HIGHEST RN 625827-33-0
DICTIONARY FILE UPDATES: 11 DEC 2003   HIGHEST RN 625827-33-0

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

   Please note that search-term pricing does apply when
   conducting SmartSELECT searches.

Crossover limits have been increased.   See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
L1   STRUCTURE UPLOADED

=> d l1
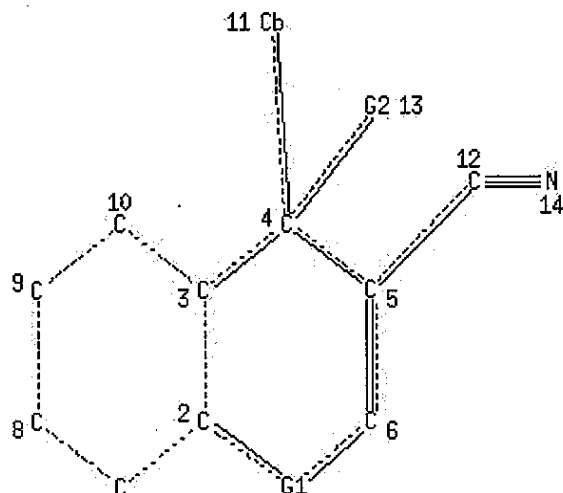L1 HAS NO ANSWERS
L1   STR

 H 17 Ak 18

 0 15 S 16
Page 1-A

Page 1-B
 7   1
Page 2-B
VAR G1=15/16
VAR G2=17/18
NODE ATTRIBUTES:
NSPEC   IS R   AT   1
NSPEC   IS R   AT   2
NSPEC   IS R   AT   3

```
NSPEC    IS R      AT    4
NSPEC    IS R      AT    5
NSPEC    IS R      AT    6
NSPEC    IS R      AT    7
NSPEC    IS R      AT    8
NSPEC    IS R      AT    9
NSPEC    IS R      AT   10
NSPEC    IS C      AT   11
NSPEC    IS C      AT   12
NSPEC    IS C      AT  ·13
NSPEC    IS C      AT   14
DEFAULT MLEVEL IS ATOM
MLEVEL   IS CLASS  AT   12 14 17 18
DEFAULT ECLEVEL IS LIMITED


GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  18


STEREO ATTRIBUTES: NONE



=> s 11
SAMPLE SEARCH INITIATED 11:06:38 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    574 TO ITERATE


100.0% PROCESSED    574 ITERATIONS                                49 ANSWERS
SEARCH TIME: 00.00.01


FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:       10043 TO    12917
PROJECTED ANSWERS:            560 TO     1400


L2            49 SEA SSS SAM L1


=>
L3        STRUCTURE UPLOADED


=> d 13
L3 HAS NO ANSWERS
L3              STR
 H 18 Ak 19


 0 16 S 17
Page 1-A
```
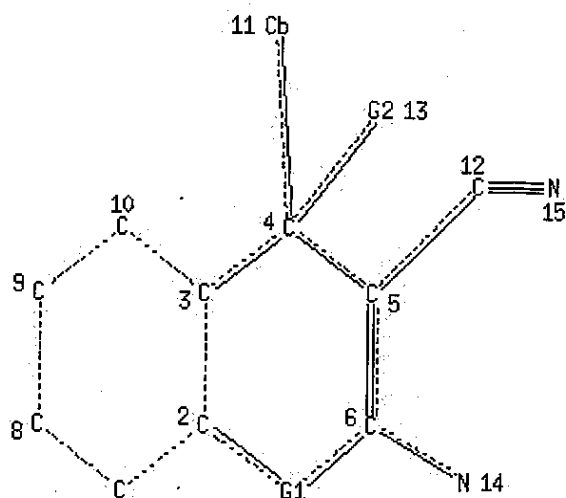
Page 1-B

7   1

Page 2-B
VAR G1=16/17
VAR G2=18/19
NODE ATTRIBUTES:
NSPEC   IS R   AT   1
NSPEC   IS R   AT   2
NSPEC   IS R   AT   3
NSPEC   IS R   AT   4
NSPEC   IS R   AT   5
NSPEC   IS R   AT   6
NSPEC   IS R   AT   7
NSPEC   IS R   AT   8
NSPEC   IS R   AT   9
NSPEC   IS R   AT   10
NSPEC   IS C   AT   11
NSPEC   IS C   AT   12
NSPEC   IS C   AT   13
NSPEC   IS C   AT   14
NSPEC   IS C   AT   15
DEFAULT MLEVEL IS ATOM
MLEVEL   IS CLASS AT   12 14 15 18 19
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   19

STEREO ATTRIBUTES: NONE

=> s 13
SAMPLE SEARCH INITIATED 11:07:36 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   298 TO ITERATE

100.0% PROCESSED   298 ITERATIONS   49 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
                         BATCH   **COMPLETE**
PROJECTED ITERATIONS: 4925 TO   6995
PROJECTED ANSWERS: 560 TO   1400

```
L4            49 SEA SSS SAM L3

=>
L5         STRUCTURE UPLOADED

=> d 15
L5 HAS NO ANSWERS
L5                  STR

  H 21 Ak 22


  0 19 S 20
Page 1-A
```
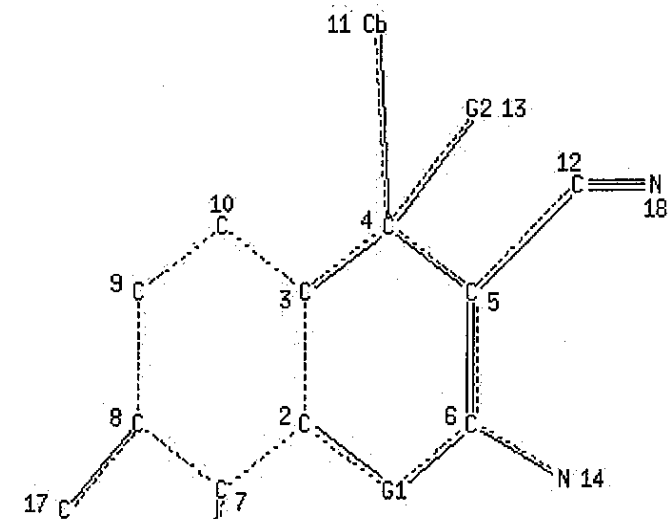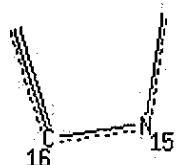


```
Page 1-B
                              1
```



```
Page 2-B
VAR G1=19/20
VAR G2=21/22
NODE ATTRIBUTES:
NSPEC    IS R        AT    1
NSPEC    IS R        AT    2
NSPEC    IS R        AT    3
NSPEC    IS R        AT    4
NSPEC    IS R        AT    5
NSPEC    IS R        AT    6
NSPEC    IS R        AT    7
NSPEC    IS R        AT    8
NSPEC    IS R        AT    9
NSPEC    IS R        AT   10
NSPEC    IS C        AT   11
NSPEC    IS C        AT   12
NSPEC    IS C        AT   13
NSPEC    IS C        AT   14
NSPEC    IS R        AT   15
NSPEC    IS R        AT   16
NSPEC    IS R        AT   17
```

```
NSPEC    IS C       AT  18
DEFAULT MLEVEL IS ATOM
MLEVEL   IS CLASS   AT   12 14 18 21 22
DEFAULT ECLEVEL IS LIMITED


GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  22


STEREO ATTRIBUTES: NONE



=> s 15
SAMPLE SEARCH INITIATED 11:08:27 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      4 TO ITERATE


100.0% PROCESSED        4 ITERATIONS                           0 ANSWERS
SEARCH TIME: 00.00.01


FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:           4 TO       200
PROJECTED ANSWERS:              0 TO         0


L6              0 SEA SSS SAM L5

=> s 15 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 147.75 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 11:08:31 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -    115 TO ITERATE


100.0% PROCESSED     115 ITERATIONS                          10 ANSWERS
SEARCH TIME: 00.00.01


L7             10 SEA SSS FUL L5


=> file hcaplus
COST IN U.S. DOLLARS                    SINCE FILE      TOTAL
                                          ENTRY        SESSION
FULL ESTIMATED COST                      152.55        152.76

FILE 'HCAPLUS' ENTERED AT 11:08:36 ON 12 DEC 2003
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FILE COVERS 1907 - 12 Dec 2003  VOL 139 ISS 25
FILE LAST UPDATED: 11 Dec 2003  (20031211/ED)
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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l7
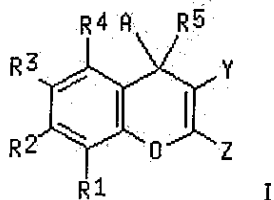L8   ` 1 L7

=> d l8, ibib abs fhitstr, 1

L8   ANSWER 1 OF 1   HCAPLUS   COPYRIGHT 2003 ACS on STN

Full   Citing
Text   References

ACCESSION NUMBER: 2002:888735 HCAPLUS
DOCUMENT NUMBER: 137:369971
TITLE: .   Preparation of substituted 4H-chromenes and analogs as
                           activators of caspases and inducers of apoptosis and
                           their uses against cancer and other disorders
INVENTOR(S):   Cai, Sui Xiong; Zhang, Hong; Jiang, Songchun; Storer,
                           Richard
PATENT ASSIGNEE(S):   Cytovia, Inc., USA
SOURCE: PCT Int. Appl., 139 pp.
                           CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

    PATENT NO.   KIND   DATE   APPLICATION NO.   DATE
    ---------------   ----   --------   ---------------   --------
    WO 2002092594   A1   20021121   WO 2002-US15399   20020516
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    US 2003065018   A1   20030403   US 2002-146138   20020516
PRIORITY APPLN. INFO.:   US 2001-290997P P 20010516
OTHER SOURCE(S):   MARPAT 137:369971
GI

AB   The present invention is directed to substituted 4H-chromenes and analogs
     thereof (shown as I; e.g. 2-amino-3-cyano-7-hydroxy-4-(3-bromo-4,5-
     dimethoxyphenyl)-4H-chromene). It also relates to the discovery that I
     are activators of caspases and inducers of apoptosis and, therefore, can
     be used to induce cell death in a variety of clin. conditions in which
   controlled growth and spread of abnormal cells occurs. In I: R1-R4 = H,

halo, haloalkyl, aryl, fused aryl, carbocyclic, heterocyclic, heteroaryl, C1-10 alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl, aminoalkyl, carboxyalkyl, nitro, amino, cyano, acylamido, hydroxy, thiol, acyloxy, azido, alkoxy, carboxy, methylenedioxy, carbonylamido or alkylthio; or R1 and R2, or R2 and R3, or R3 and R4, taken together with the atoms to which they are attached form an aryl, heteroaryl, partially satd. carbocyclic or partially satd. heterocyclic group, wherein said group is optionally substituted. R5 is H or C1-10 alkyl; A is optionally substituted and is aryl, heteroaryl, satd. carbocyclic, partially satd. carbocyclic, satd. heterocyclic, partially satd. heterocyclic or arylalkyl; Y is CN, COR7, CO2R7 or CONRxRy, wherein R7, Rx and Ry = H, C1-10 alkyl, haloalkyl, aryl, fused aryl, carbocyclic, heterocyclic, heteroaryl, alkenyl, alkynyl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, carbocycloalkyl, heterocycloalkyl, hydroxyalkyl or aminoalkyl; or Rx and Ry are taken together with the N to which they are attached to form a heterocycle; and Z is NR8R9, NHCOR8, N(COR9)2, N(COR8)(COR9), N:CHOR8 or N:CHR8, wherein R8 and R9 = H, C1-4 alkyl or aryl, or R8 and R9 are combined together with the group attached to them to form a heterocycle. The EC50 values for >80 I against T-47D and ZR-75-1 human breast cancer cell lines are tabulated, e.g. 30 and 25 nM, resp., for 2-amino-3-cyano-4-(3-bromo-4,5-dimethoxyphenyl)-4H-indolo[7,6-b]pyran. Although the methods of prepn. are not claimed, 81 example prepns. are included.

IT **475576-80-8P**, 2-Amino-3-cyano-4-(3-bromo-4,5-dimethoxyphenyl)-4H-indolo[7,6-b]pyran
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
    (drug candidate; prepn. of substituted 4H-chromenes and analogs as activators of caspases and inducers of apoptosis and their uses against cancer and other disorders)

RN   475576-80-8 HCAPLUS
CN   Pyrano[3,2-g]indole-3-carbonitrile, 2-amino-4-(3-bromo-4,5-dimethoxyphenyl)-4,9-dihydro- (9CI) (CA INDEX NAME)
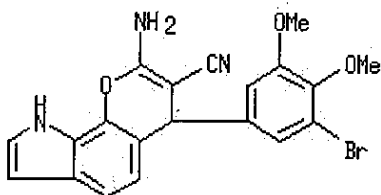
REFERENCE COUNT: 1   THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file caold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	6.79	159.55

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.65	-0.65

FILE 'CAOLD' ENTERED AT 11:08:48 ON 12 DEC 2003
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FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

   This file contains CAS Registry Numbers for easy and accurate
   substance identification. Title keywords, authors, patent
   assignees, and patent information, e.g., patent numbers, are
   now searchable from 1907-1966. TIFF images of CA abstracts
   printed between 1907-1966 are available in the PAGE
   display formats.

   This file supports REG1stRY for direct browsing and searching of
   all substance data from the REGISTRY file. Enter HELP FIRST for
   more information.

=>   d his

       (FILE 'HOME' ENTERED AT 11:01:27 ON 12 DEC 2003)

       FILE 'REGISTRY' ENTERED AT 11:01:37 ON 12 DEC 2003
L1   STRUCTURE UPLOADED
L2   49 S L1
L3   STRUCTURE UPLOADED
L4   49 S L3
L5   STRUCTURE UPLOADED
L6   0 S L5
L7   10 S L5 FULL

       FILE 'HCAPLUS' ENTERED AT 11:08:36 ON 12 DEC 2003
L8   1 S L7

       FILE 'CAOLD' ENTERED AT 11:08:48 ON 12 DEC 2003

=> s l7
L9   0 L7

=> log y
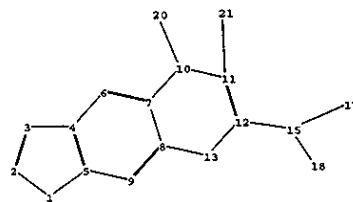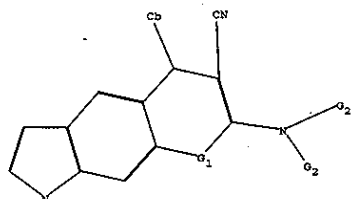COST IN U.S. DOLLARS   SINCE FILE   TOTAL
                                                 ENTRY   SESSION
FULL ESTIMATED COST   0.40   159.95

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)   SINCE FILE   TOTAL
                                                 ENTRY   SESSION
CA SUBSCRIBER PRICE   0.00   -0.65

STN INTERNATIONAL LOGOFF AT 11:08:56 ON 12 DEC 2003

chain nodes :
    15   17   18   20   21
ring nodes :
    1   2   3   4   5   6   7   8   9   10   11   12   13
chain bonds :
    10-20   11-21   12-15   15-17   15-18
ring bonds :
    1-2   1-5   2-3   3-4   4-5   4-6   5-9   6-7   7-8   7-10   8-9   8-13   10-11   11-12   12-13
exact/norm bonds :
    1-2   1-5   2-3   3-4   7-10   8-13   10-11   10-20   11-12   11-21   12-13   12-15   15-17   15-18
normalized bonds :
    4-5   4-6   5-9   6-7   7-8   8-9
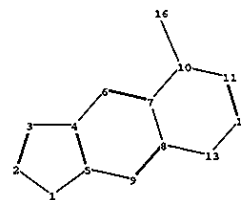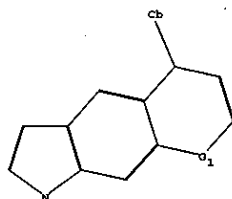

G1:O,S

G2:Ak,H

Match level :
    1:Atom   2:Atom   3:Atom   4:Atom   5:Atom   6:Atom   7:Atom   8:Atom   9:Atom   10:Atom   11:Atom
    12:Atom   13:Atom   15:CLASS   17:CLASS   18:CLASS   20:Atom   21:CLASS

chain nodes :
    16
ring nodes :
    1   2   3   4   5   6   7   8   9   10   11   12   13
chain bonds :
    10-16
ring bonds :
    1-2   1-5   2-3   3-4   4-5   4-6   5-9   6-7   7-8   7-10   8-9   8-13   10-11   11-12   12-13
exact/norm bonds :
    1-2   1-5   2-3   3-4   7-10   8-13   10-11   10-16   11-12   12-13
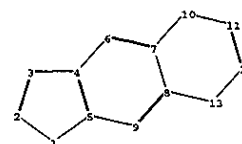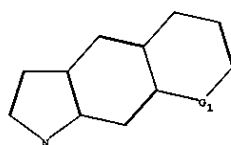normalized bonds :
    4-5   4-6   5-9   6-7   7-8   8-9

G1:O,S

G2:Ak,H

Match level :
    1:Atom   2:Atom   3:Atom   4:Atom   5:Atom   6:Atom   7:Atom   8:Atom   9:Atom   10:Atom   11:Atom
    12:Atom   13:Atom   16:Atom

ring nodes :
    1   2   3   4   5   6   7   8   9   10   11   12   13
ring bonds :
    1-2   1-5   2-3   3-4   4-5   4-6   5-9   6-7   7-8   7-10   8-9   8-13   10-11   11-12   12-13
exact/norm bonds :
    1-2   1-5   2-3   3-4   7-10   8-13   10-11   11-12   12-13
normalized bonds :
    4-5   4-6   5-9   6-7   7-8   8-9

G1:O,S

G2:Ak,H

Match level :
    1:Atom   2:Atom   3:Atom   4:Atom   5:Atom   6:Atom   7:Atom   8:Atom   9:Atom   10:Atom   11:Atom
    12:Atom   13:Atom

```
* * * * * * * * *   Welcome to STN International   * * * * * * * * * *

NEWS   1          Web Page URLs for STN Seminar Schedule - N. America
NEWS   2          "Ask CAS" for self-help around the clock
NEWS   3   SEP 09  CA/CAplus records now contain indexing from 1907 to the
                    present
NEWS   4   AUG 05  New pricing for EUROPATFULL and PCTFULL effective
                    August 1, 2003
NEWS   5   AUG 13  Field Availability (/FA) field enhanced in BEILSTEIN
NEWS   6   AUG 18  Data available for download as a PDF in RDISCLOSURE
NEWS   7   AUG 18  Simultaneous left and right truncation added to PASCAL
NEWS   8   AUG 18  FROSTI and KOSMET enhanced with Simultaneous Left and Righ
                    Truncation
NEWS   9   AUG 18  Simultaneous left and right truncation added to ANABSTR
NEWS 10   SEP 22  DIPPR file reloaded
NEWS 11   DEC 08  INPADOC: Legal Status data reloaded
NEWS 12   SEP 29  DISSABS now available on STN
NEWS 13   OCT 10  PCTFULL: Two new display fields added
NEWS 14   OCT 21  BIOSIS file reloaded and enhanced
NEWS 15   OCT 28  BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 16   NOV 24  MSDS-CCOHS file reloaded
NEWS 17   DEC 08  CABA reloaded with left truncation
NEWS 18   DEC 08  IMS file names changed
NEWS 19   DEC 09  Experimental property data collected by CAS now available
                    in REGISTRY
NEWS 20   DEC 09  STN Entry Date available for display in REGISTRY and CA/CAplus

NEWS EXPRESS    NOVEMBER 14 CURRENT WINDOWS VERSION IS V6.01c, CURRENT
                 MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
                 AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
NEWS HOURS      STN Operating Hours Plus Help Desk Availability
NEWS INTER      General Internet Information
NEWS LOGIN      Welcome Banner and News Items
NEWS PHONE      Direct Dial and Telecommunication Network Access to STN
NEWS WWW        CAS World Wide Web Site (general information)
```

Enter NEWS followed by the item number or name to see news on that
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```
   * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *
```

FILE 'HOME' ENTERED AT 10:28:25 ON 12 DEC 2003

```
=> g
G IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> file reg
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                  ENTRY        SESSION
FULL ESTIMATED COST                               0.21          0.21
```

FILE 'REGISTRY' ENTERED AT 10:28:33 ON 12 DEC 2003
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 11 DEC 2003   HIGHEST RN 625827-33-0
DICTIONARY FILE UPDATES: 11 DEC 2003   HIGHEST RN 625827-33-0

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

   Please note that search-term pricing does apply when
   conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
L1   STRUCTURE UPLOADED
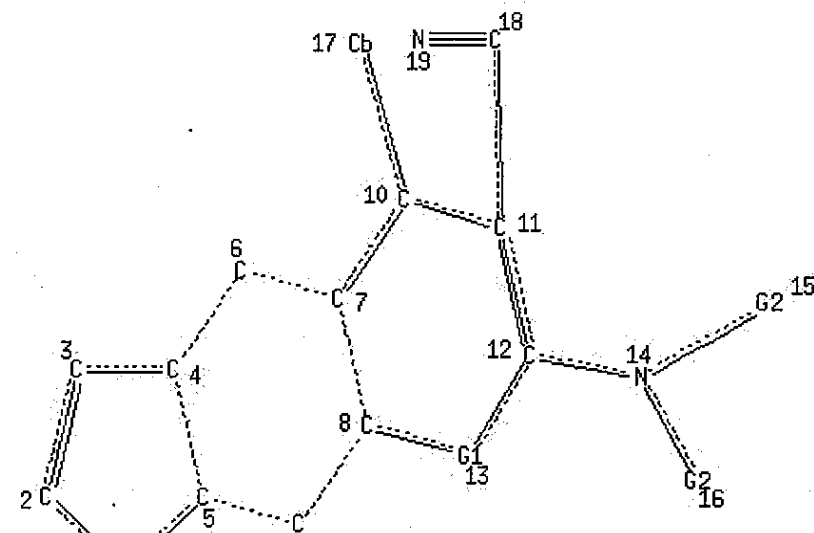
=> d l1
L1 HAS NO ANSWERS
L1   .   STR

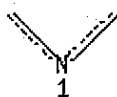 Ak 22H 23

 0 20 S 21
 Page 1-A

Page 1-B

Page 2-B
VAR G1=20/21
VAR G2=22/23

```
NODE ATTRIBUTES:
NSPEC   IS R      AT   1
NSPEC   IS R      AT   2
NSPEC   IS R      AT   3
NSPEC   IS R      AT   4
NSPEC   IS R      AT   5
NSPEC   IS R      AT   6
NSPEC   IS R      AT   7
NSPEC   IS R      AT   8
NSPEC   IS R      AT   9
NSPEC   IS R      AT   10
NSPEC   IS R      AT   11
NSPEC   IS R      AT   12
NSPEC   IS R      AT   13
NSPEC   IS C      AT   14
NSPEC   IS C      AT   15
NSPEC   IS C      AT   16
NSPEC   IS C      AT   17
NSPEC   IS C      AT   18
NSPEC   IS C      AT   19
DEFAULT MLEVEL IS ATOM
MLEVEL   IS CLASS  AT   14 18 19 22 23
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  23

STEREO ATTRIBUTES: NONE


=> s l1
SAMPLE SEARCH INITIATED 10:31:20 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     42 TO ITERATE

100.0% PROCESSED     42 ITERATIONS                              0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:   ONLINE  **COMPLETE**
                         BATCH   **COMPLETE**
PROJECTED ITERATIONS:         452 TO      1228
PROJECTED ANSWERS:              0 TO         0

L2              0 SEA SSS SAM L1

=> s l1 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 147.75 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 10:31:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -    997 TO ITERATE

100.0% PROCESSED    997 ITERATIONS                             0 ANSWERS
SEARCH TIME: 00.00.01

L3              0 SEA SSS FUL L1

=>
L4         STRUCTURE UPLOADED

=> d 14
```
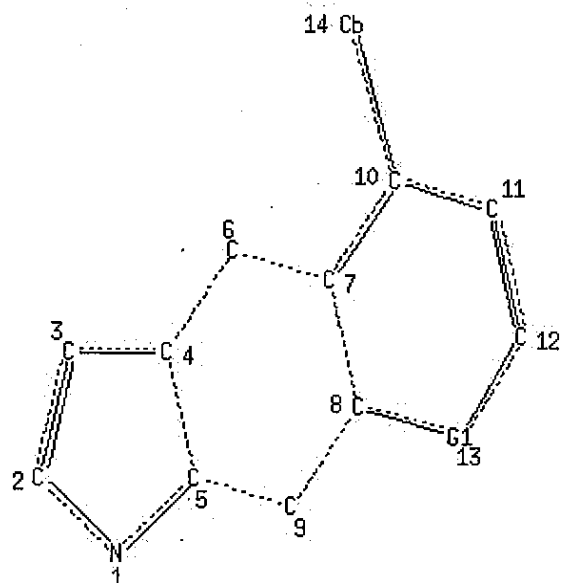
L4 HAS NO ANSWERS
L4   STR

 0 15 S 16   .
Page 1-A

Page 1-B
VAR G1=15/16
NODE ATTRIBUTES:
NSPEC   IS R   AT   1
NSPEC   IS R   AT   2
NSPEC   IS R   AT   3
NSPEC   IS R   AT   4
NSPEC   IS R   AT   5
NSPEC   IS R   AT   6
NSPEC   IS R   AT   7
NSPEC   IS R   AT   8
NSPEC   IS R   AT   9
NSPEC   IS R   AT   10
NSPEC   IS R   AT   11
NSPEC   IS R   AT   12
NSPEC   IS R   AT   13
NSPEC   IS C   AT   14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   16

STEREO ATTRIBUTES: NONE

=> s 14
SAMPLE SEARCH INITIATED 10:32:06 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   3002 TO ITERATE

 33.3% PROCESSED   1000 ITERATIONS   0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

```
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:          56755 TO      63325
PROJECTED ANSWERS:                 0 TO          0


L5              0 SEA SSS SAM L4

=> s 14 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 147.75 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 10:32:10 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -  59948 TO ITERATE


100.0% PROCESSED   59948 ITERATIONS                      0 ANSWERS
SEARCH TIME: 00.00.01


L6              0 SEA SSS FUL L4


=>
L7         STRUCTURE UPLOADED


=> d 17
L7 HAS NO ANSWERS
L7                 STR

 0 14 S 15
Page 1-A
```
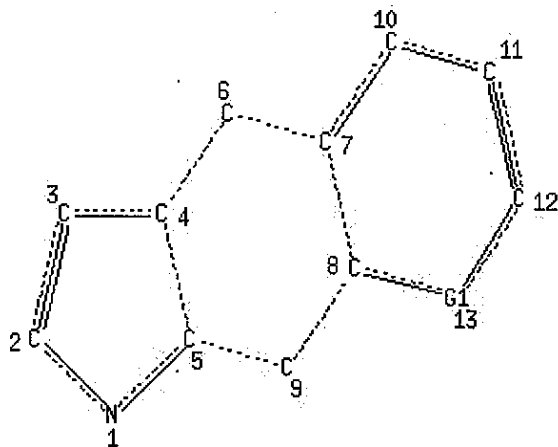


```
Page 1-B
VAR G1=14/15
NODE ATTRIBUTES:
NSPEC   IS R      AT   1
NSPEC   IS R      AT   2
NSPEC   IS R      AT   3
NSPEC   IS R      AT   4
NSPEC   IS R      AT   5
NSPEC   IS R      AT   6
NSPEC   IS R      AT   7
NSPEC   IS R      AT   8
NSPEC   IS R      AT   9
NSPEC   IS R      AT  10
NSPEC   IS R      AT  11
NSPEC   IS R      AT  12
NSPEC   IS R      AT  13
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
```

```
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  15

STEREO ATTRIBUTES: NONE


=> s 17
SAMPLE SEARCH INITIATED 10:32:50 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   3002 TO ITERATE


 33.3% PROCESSED    1000 ITERATIONS                              0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01


FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:        56755 TO      63325
PROJECTED ANSWERS:              0 TO          0


L8          0 SEA SSS SAM L7


=> s 17 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 147.75 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 10:32:57 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -  59948 TO ITERATE


100.0% PROCESSED   59948 ITERATIONS                            24 ANSWERS
SEARCH TIME: 00.00.01


L9          24 SEA SSS FUL L7


=> file hcaplus
COST IN U.S. DOLLARS                          SINCE FILE        TOTAL
                                                ENTRY          SESSION
FULL ESTIMATED COST                            446.05          446.26
```

FILE 'HCAPLUS' ENTERED AT 10:33:01 ON 12 DEC 2003
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FILE COVERS 1907 - 12 Dec 2003 VOL 139 ISS 25
FILE LAST UPDATED: 11 Dec 2003 (20031211/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> s 19
L10   · 8 L9

=> d l10, ibib abs fhitstr, 1-8

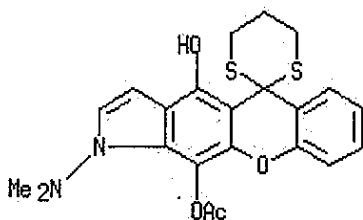L10   ANSWER 1 OF 8   HCAPLUS   COPYRIGHT 2003 ACS on STN

```
Full      Citing
Text      References
```

ACCESSION NUMBER:	1996:689416 HCAPLUS
DOCUMENT NUMBER:	126:7949
TITLE:	Novel Construction of Highly-Substituted Xanthones
AUTHOR(S):	Sun, Lijun; Liebeskind, Lanny S.
CORPORATE SOURCE:	Sanford S. Atwood Chemistry Center, Emory University, Atlanta, GA, 30322, USA
SOURCE:	Journal of the American Chemical Society (1996), 118(49), 12473-12474
	CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER:	American Chemical Society
DOCUMENT TYPE:	Journal
LANGUAGE:	English
OTHER SOURCE(S):	CASREACT 126:7949

AB   O-, C-Dianions generated from dithiane protected salicylaldehydes condense
     with esters of squaric acid in a two-step process to provide
     γ-benzopyrone-fused cyclobutenediones, with the benzopyrone still
     protected as the dithiane. These versatile cyclobutenediones undergo
     regiospecific 1,2-addn. of unsatd. organolithium reagents (Ph, substituted
     Ph, 1- and 2-naphthyl, 2- and 3-furyl, 2-thienyl, 2-pyrrolyl, 2-indolyl,
     β-styryl, 2-dihydropyranyl) at the most electrophilic and least
     hindered cyclobutenedione carbonyl group. The 1,2-adducts rearrange
     either spontaneously at room temp. or on brief warming in THF soln. to
     give, after hydrolysis of the dithiane, a wide variety of substituted
     xanthones and xanthones linearly fused to arom., heteroarom., and
     heterocyclic rings.
IT 184023-43-6P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (prepn. of xanthones)
RN   184023-43-6   HCAPLUS
CN   Spiro[[1]benzopyrano[3,2-f]indole-5(1H),2'-[1,3]dithiane]-4,11-diol,
     1-(dimethylamino)-, 11-acetate (9CI)   (CA INDEX NAME)
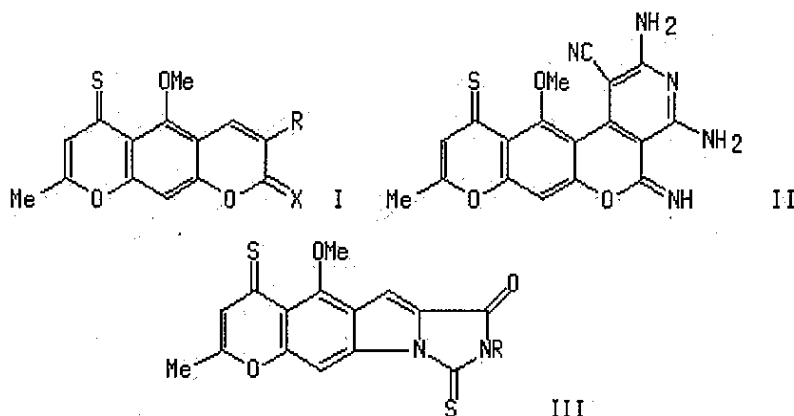

L10   ANSWER 2 OF 8   HCAPLUS   COPYRIGHT 2003 ACS on STN

```
Full      Citing
Text      References
```

|	
ACCESSION NUMBER:	1991:101768 HCAPLUS
DOCUMENT NUMBER:	114:101768
TITLE:	Benzodipyranthione derivatives of expected biological activities
AUTHOR(S):	Abdelaziz, Mahfouz A.

AB   6-Formyl-7-hydroxy-5-methoxy-2-methylbenzopyran-4-thione reacted with
    cyanoethanoic acid hydrazide, 2-amino-1,1,3-tricyanoprop-1-ene,
    benzoylacetonitrile, malononitrile and 2-thiohydantoins to afford
    heterocycles , e.g., benzodipyrans I [X=O,NH; R = CONHNH2; X=NH, R =
    C(NH2):C(CN)2; X = O, NH; R = COPh, cyano], pyranobenzopyranopyridine II
    and benzopyranopyrroloimidazolinethiones III (R = H, Ph).
IT   132369-76-7P
    RL: SPN (Synthetic preparation); PREP (Preparation)
      (prepn. of)
RN   132369-76-7 HCAPLUS
CN   4H,7H-Imidazo[1,5-a]pyrano[3,2-f]indol-7-one, 8,9-dihydro-5-methoxy-2-
    methyl-4,9-dithioxo- (9CI) (CA INDEX NAME)
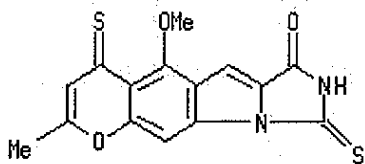
L10 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2003 ACS on STN

AB   6-Formyl-5-methoxy-2-methylchromone derivs. I (R = H, NO2, Br, R1 = OH; R
      = H, R1 = OMe) condensed with 2-thioxo-4-imidazolinones II (R2 = H, R3 =
      'H, Ph; R2 = Ph, R3 = H) to form the corresponding
      chromonopyrroloimidazolinones III or the arylidenethioxoimidazolinones IV.
      The activity of the imidazole moiety NH of III (R = R3 = H) (V) was
      confirmed by formation of the Mannich bases. Moreover, alkylation of V
      was gave alkylmercapto derivs. The antimicrobial activities of compds. II
      and IV were studied.

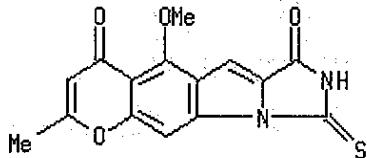IT 124041-37-8P
      RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
      (Reactant or reagent)
          (prepn. and alkylation or Mannich reactions of)

RN   124041-37-8 HCAPLUS

CN   4H,7H-Imidazo[1,5-a]pyrano[3,2-f]indole-4,7-dione, 8,9-dihydro-5-methoxy-2-
      methyl-9-thioxo- (9CI)   (CA INDEX NAME)

L10   ANSWER 4 OF 8   HCAPLUS   COPYRIGHT 2003 ACS on STN
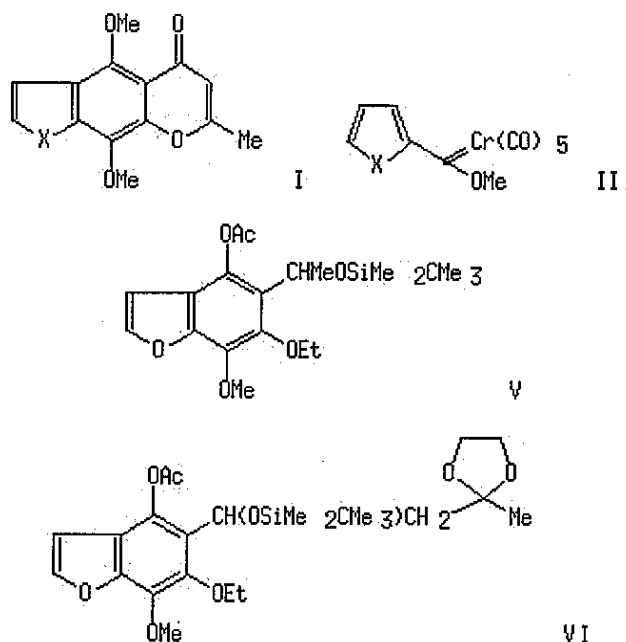
AB   The synthesis of khellin (I; X = O), a lipid-altering and
      antiatherosclerotic furochromone, was accomplished by two different routes
      in six and seven steps, resp. The key steps in two alternative approaches
      are the cycloaddn. reactions of a furan-methoxy chromium carbene complex
      II (X = O) with EtOC≡CCHROSiMe2CMe3 [R = Me (III),
      2-methyl-1,3-dioxolan-2-yl (IV)] to provide the direct construction of the
      benzofuran acetates V and VI, which bear the functional groups necessary
      for formation of the γ-pyrone ring. The reactions of II (X = O)
      with alkoxyalkynes in the presence of Ac2O and Et3N in THF provided the
      acetate derivs. of the desired benzofurans in fair to good yields. The
      alkoxyalkyne III introduces the acetyl group precursor and IV bears the
      masked β-diketone unit. The benzofuran acetate V leads to khellinone
      in four steps by direct conversion of the acetate to a Me ether, the
      conversion of the silyloxy to the ketone, and the selective cleavage of
      the Et ether. The other benzofuran acetate VI leads to khellinquinone in
      five steps by the direct conversion of the acetate to the Me ether, the
      conversion of the silyloxy ether to a ketone, oxidn. of the
      p-dimethoxybenzene ring, and sequential aq. acid-catalyzed pyrone ring
      formation. Khellinone and khellinquinone are converted to I independently
      by known procedures. These two synthetic routes are applied to the
      syntheses of khellin analogs, such as the pyrrole (I; X = NMe) and phenyl
      (I; X = CH:CH) analogs of khellin, using the reactions of the resp.
      pyrrolyl or Ph chromium carbene complexes II (X = NMe, CH:CH) with III and
      IV.
IT 121444-68-6P
      RL: SPN (Synthetic preparation); PREP (Preparation)
          (total synthesis of)

RN   121444-68-6   HCAPLUS
CN   Pyrano[3,2-f]indol-4(8H)-one, 5,9-dimethoxy-2,8-dimethyl- (9CI)   (CA INDEX
      NAME)

Z = Me

L10   ANSWER 5 OF 8   HCAPLUS   COPYRIGHT 2003 ACS on STN

Full Text | Citing References
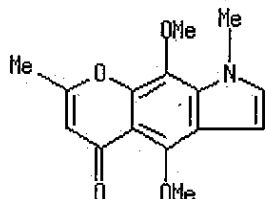
ACCESSION NUMBER: 1986:68836   HCAPLUS
DOCUMENT NUMBER: 104:68836
TITLE: Benzopyran derivatives and anti-asthma compositions
                         containing them
INVENTOR(S):   Gould, Kenneth John; Suschitzky, John Louis; Dicker,
                         Ian Douglas
PATENT ASSIGNEE(S):   Fisons PLC, UK
SOURCE: Eur. Pat. Appl., 118 pp.
                         CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

      PATENT NO.   KIND DATE   APPLICATION NO.   DATE
      --------------   ---- --------   ---------------- --------
      EP 150966   A2   19850807   EP 1985-300381   19850121
      EP 150966   A3   19860625
      EP 150966   B1   19890712
         R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE
      AT 44530   E   19890715   AT 1985-300381   19850121
      ZA 8500550   A   19851127   ZA 1985-550   19850123
      DK 8500313   A   19850727   DK 1985-313   19850124
      DK 162893   B   19911223
      FI 8500324   A   19850727   FI 1985-324   19850125
      FI 84482   B   19910830
      FI 84482   C   19911210
      NO 8500303   A   19850729   NO 1985-303   19850125
      JP 60163877   A2   19850826   JP 1985-11134   19850125
      ES 539846   A1   19870501   ES 1985-539846   19850125
      CA 1268460   A1   19900501   CA 1985-472848   19850125
      IL 74166   A1   19901105   IL 1985-74166   19850125
      US 4670452   A   19870602   US 1985-695459   19850128
      US 4698345   A   19871006   US 1985-695460   19850128
      AU 8538194   A1   19850801   AU 1985-38194   19850130
      AU 582135   B2   19890316
      CA 1250584   A1   19890228   CA 1985-473177   19850130
      CN 85105645   A   19870128   CN 1985-105645   19850724
      CN 1010855   B   19901219
      ES 554962   A1   19870701   ES 1986-554962   19860514
PRIORITY APPLN. INFO.:   GB 1984-2047   19840126
   GB 1984-2577   19840201
                                           EP 1985-300381   19850121
GI
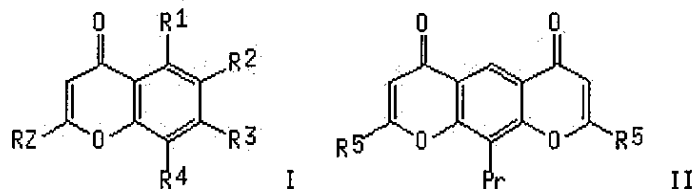
AB   Antiasthmatic (no data) title compds. [I; R = CO2H, tetrazol-5-yl; adjacent pairs of R1-R4 = atoms required to complete an (un)substituted 5- or 6-membered arom. or heteroarom. ring; Z = bond, (CH2)m, arylene, m = 1-10] were prepd. Thus, di-Et 4,6-dioxo-10-propyl-4H,6H-benzo[1,2-b:5,4-b']dipyran-2,8-dicarboxylate (II, R5 = CO2Et) was treated with NH3 in EtOH to give II (R5 = CONH2) which was dehydrated by heating in DMF with POCl3 to give II (R5 = cyano). This was heated at 60° with NaN3 in DMF to give II (R5 = 1H-tetrazol-5-yl), converted to its di-Na salt.

IT   99370-80-6P
         RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
           (prepn. and sapon. of)

RN   99370-80-6   HCAPLUS

CN   Pyrano[3,2-f]indole-2,7-dicarboxylic acid, 4,8-dihydro-4-oxo-9-propyl-, diethyl ester (9CI)   (CA INDEX NAME)
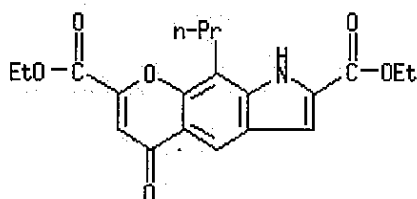
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ACCESSION NUMBER: 1972:434319   HCAPLUS
DOCUMENT NUMBER: 77:34319
TITLE: Antiinflammatory 2,3-bis(p-methoxyphenyl)indole-5-carboxylic acid derivatives
INVENTOR(S):   Szmuszkovicz, Jacob
PATENT ASSIGNEE(S):   Upjohn Co.
SOURCE: U.S., 8 pp. Division of U.S. 3,565,912 (CA 75;35734t).
                               CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3654308	A	19720404	US 1970-65315	19700819
PRIORITY APPLN. INFO.:			US 1970-65315	19700819

GI   For diagram(s), see printed CA Issue.
AB   Division of U.S. 3,565,912 (CA 75: 35734t). Four antiinflammatory 5-alkanoyl-2,3-bis(p-methoxyphenyl)indoles I (R = H, Me; R1 = H, Me, Ac)

were prepd. Anisoin and p-H2NC6H4CO2Et refluxed 2 hr in xylene in the presence of p-MeC6H4SO3H gave 81% Et p-[[p-methoxy-α-(p-methoxyphenyl)phenacyl]amino]benzoate, which on further heating with p-H2NC6H4CO2Et and pMeC6H4SO3H gave II (R = Et, R1 = H). Refluxing II (R = Et, R1 = H) in aq. alc. with KOH gave its corresponding acid, which was then refluxed in C6H6 with SOCl2, and the product added to CdCl2 and MeMgBr in Et2O, refluxed 4 hr to give I (R = Me, R1 = H). Formulations of I were given. The following II (R1 = H) (R = (CH2)2OH, Et, H) were claimed.

IT 23659-79-2P
    RL: SPN (Synthetic preparation); PREP (Preparation)
       (prepn. of)
RN 23659-79-2 HCAPLUS
CN Pyrano[3,2-f]indol-4(8H)-one, 2,3,6,7-tetrakis(4-methoxyphenyl)- (9CI)
    (CA INDEX NAME)
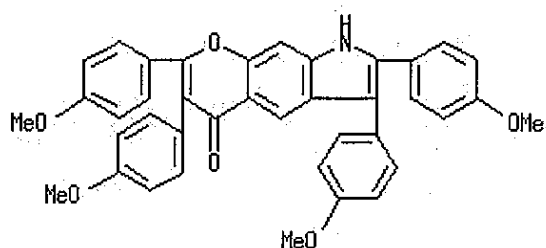
L10 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2003 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 1971:435734 HCAPLUS
DOCUMENT NUMBER: 75:35734
TITLE: Antiinflammatory 5-alkanoyl-2,3-bis(p-methoxyphenyl)indoles
INVENTOR(S):   Szmuszkovicz, Jacob
PATENT ASSIGNEE(S):   Upjohn Co.
SOURCE: U.S., 8 pp.
                           CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3565912	A	19710223	US 1969-794402	19690127

PRIORITY APPLN. INFO.:   US 1969-794402   19690127

GI For diagram(s), see printed CA Issue.
AB The title indoles (I, R = H, Me, or Ac; R1 = H, Me, Et, HO, EtO, iso-Pr) are produced by heating p-H2NC6H4CO2R1 with anisoin in the presence of an acid catalyst and further heating with an alkyl p-aminobenzoate and acid catalyst, sapong. the alkyl 2,3-bis(p-methoxyphenyl)indole-5-carboxylate, converting to the acyl chloride and treating the chloride in the presence of CdCl2 with RMgX. The product was treated with NaH and alkyl halide or acyl halide. Alternatively, p-H2NNHC6H4CO2R1 was heated with deoxyanisoin, the mixt. refluxed with alc. HCl or HOCH2CH2OH, and the ester of 2,3-bis(p-methoxyphenyl)-indole-5-carboxylic acid treated to give the free acid, which was then converted as above to I. Thus anisoin and p-H2NC6H4CO2Et refluxed in xylene in the presence of p-MeC6H4SO3H yielded 81% Et p-[[p-methoxy α-(p-methoxyphenyl)phenacyl]-amino benzoate,
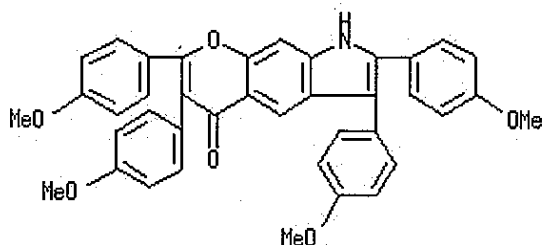
which was heated with p-H2NC6H4CO2Et to give I (R = H, R1 = OEt) (II) Et
2,3-bis(p-methoxyphenyl)indole-5-carboxylate. II refluxed in aq. alc with
KOH gave I (R = H, R1 = OH) (III), m. 295-7°. Equimolar amts. of
p-EtO2CC6H4NHNH2 and deoxyanisoin refluxed with HOCH2CH2OH yielded
2-(hydroxyethyl)-2,3-bis(p-methoxyphenyl)indole-5-carboxylate, which was
hydrolyzed and acidified as above to give III. III refluxed in C6H6 with
SOCl2 and the product added to CdCl2 and MeMgBr in Et2O and refluxed 4 hr
gave I (R = Me, R1 = H) (IV), m. 227-3°.
IT 23659-79-2P
        RL: SPN (Synthetic preparation); PREP (Preparation)
            (prepn. of)
RN   23659-79-2 HCAPLUS
CN   Pyrano[3,2-f]indol-4(8H)-one, 2,3,6,7-tetrakis(4-methoxyphenyl)- (9CI)
        (CA INDEX NAME)

L10 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2003 ACS on STN
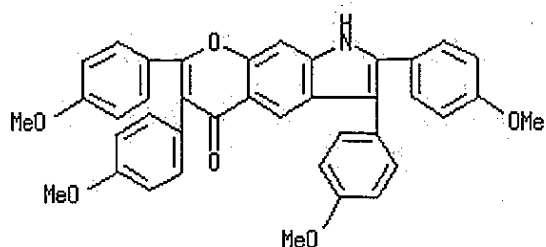
| Full Text | Citing References |

ACCESSION NUMBER:	1969:491199 HCAPLUS
DOCUMENT NUMBER:	71:91199
TITLE:	Synthesis and antiinflammatory activity of 5-substituted 2,3-bis(p-methoxyphenyl)indoles
AUTHOR(S):	Youngdale, Gilbert A.; Glenn, E. Myles; Lednicer, Daniel; Szmuszkovicz, Jacob
CORPORATE SOURCE:	Res. Lab., Upjohn Co., Kalamazoo, MI, USA
SOURCE:	Journal of Medicinal Chemistry (1969), 12, 948-9 CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE:	Journal
LANGUAGE:	English

GI   For diagram(s), see printed CA Issue.
AB   p-Carbethoxyphenylhydrazine is treated with deoxyanisoin to give Et
     2,3-bis(p-carbethoxyphenyl)indole-5-carboxylate (I), 2,3,6,7-tetrakis(p-
     carbethoxyphenyl)pyrano-[3,2-f]indolin-4(8H)-one (II) is obtained as a
     by-product. I is transesterified to give III; IV and V are prepd. from
     III. The antiinflammatory activity of V is equal to that of VI.
IT 23659-79-2P
        RL: SPN (Synthetic preparation); PREP (Preparation)
            (prepn. of)
RN   23659-79-2 HCAPLUS
CN   Pyrano[3,2-f]indol-4(8H)-one, 2,3,6,7-tetrakis(4-methoxyphenyl)- (9CI)
        (CA INDEX NAME)

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